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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,135	06/27/2003	Reinhard Lihl	LVIP106US	1134

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EXAMINER

BLAKE, CAROLYN T

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,135

Applicant(s)

LIHL ET AL.

Examiner

Carolyn T. Blake

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 5-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the Pre-Appeal Conference held on May 31, 2005. In view of paragraph 12 of the specification, the rejections under USC 112, first and second paragraphs are withdrawn.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4,511,224 to Sitte et al in view of German Patent DE 36 15 713 to Wolf and US Patent Application 2003/0024368 A1 to Fukuoka.

Sitte et al disclose a microtome substantially as claimed, including a knife (5), a specimen arm (1) movable relative to the knife, at least one light source (18) acting as a base-mounted illumination system, at least one light source (17) acting as an incident illumination system, and at least one light source (12) acting as an internal preparation illumination system, and wherein all said illumination systems illuminate a region around the preparation.

Sitte et al fail to disclose the light source is a light-emitting diode. Wolf discloses a microtome (FIGS 1 and 2) having a specimen arm (18) and an illumination system with a light source in which the light source is a light-emitting diode (89). Furthermore, Fukuoka discloses an illumination system for a cutting device in which multiple sources of light can be interchanged. Fukuoka states it is preferable to use LEDs because they generate relatively no heat in comparison to other light types (paragraph 55).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide light-emitting diodes, as disclosed by Wolf, on the Sitte et al illumination systems in order to reduce heat generation, as disclosed by Fukuoka.

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sitte et al in view of Wolf and Fukuoka as applied to claim 1 above, and further in view of Shankle et al (6,195,016 B1).

Regarding claim 2, the modified Sitte et al device discloses the base-mounted illumination system encompasses at least one light-emitting diode, but fails to disclose a frosted glass disk mounted in front of the light-emitting diode. Shankle et al disclose the use of a frosted glass disk in combination with LEDs for the purpose of providing uniform white illumination light (col. 7, lines 1-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a frosted glass disk, as disclosed by Shankle et al, on the modified Sitte et al device for the purpose of providing uniform white illumination light.

Regarding claim 3, Sitte et al disclose at least one light source (18) is mounted on the microtome in such a way that a light beam proceeding from the base-mounted illumination system is reflected by a backside of the knife (5) and at the preparation (3) so as thereby to achieve uniform illumination of the gap between the knife and preparation.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sitte et al in view of Wolf, Fukuoka, and Shankle et al as applied to claims 2 and 3 above, and further in view of Douglas-Hamilton et al (4,896,967).

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Sitte et al disclose the base-mounted illuminations system (18) coincides with an optical axis of an observation microscope (6). Still, the modified Sitte et al device fails to disclose the base-mounted illumination system has first and second light-emitting diodes that are inclined with respect to one another at an angle. Douglas-Hamilton et al disclose a base-mounted illumination system (FIG 8) with first and second light-emitting diodes (134) that are inclined with respect to one another at an angle (142). This configuration enhances the uniformity of illumination while preventing direct radiation from entering the observation microscope (col. 7, lines 19-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a first and second light-emitting diode that are inclined with respect to one another at an angle, as disclosed by Douglas-Hamilton et al, on the modified Sitte et al device for the purpose of providing uniform illumination while reducing direct radiation.

Response to Arguments

6. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn T. Blake whose telephone number is (571) 272-4503. The examiner can normally be reached on Monday to Friday, 8:00 AM to 5:30 PM, alternating Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



CB

September 12, 2006



BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER